

Appl. No. 09/213,096
Amndt. Dated 08/20/2004
Reply to Office Action of 12/29/2003

REMARKS/ARGUMENTS

The present application is a Request for Continued Examination under 37 C.F.R. §1.114 of pending U.S. Application Serial Number 09/213,096, which was filed on December 17, 1998. This Amendment is to support the Request for Continued Examination concurrently filed therein.

In the final Office Action dated December 21, 2003, the Office Action rejected claims 1-8, 21-23 and 25-38 under 35 U.S.C. § 102(e) as being anticipated by Bellenger (US 5,802,054) in view of Muller et al. (US 6,021,132).

Claims 1-8, 21-23 and 25-38 remain in this application. Claims 1, 21, 25, 32 and 38 have been amended. Reconsideration in light of the amendments and remarks made herein is respectfully requested.

Double Patenting

The Office Action rejects claims 1, 21, 25, 32 and 38 under the judicially created doctrine of the obviousness-type double patenting of the claims 1, 10, 16 and 19 of copending Application No. 09/271,011. This is a provisional obviousness-type double patenting rejection because the conflicting claims have not in fact been patented.

Rejection Under 35 U.S.C. § 103(a)

The Office Action states that claims 1-8, 21-23 and 25-38 were rejected under 35 U.S.C. § 102(e) as being anticipated by Bellenger (US 5,802,054) ("Bellenger") in view of Muller et al. (US 6,021,132) ("Muller"). Applicants note that the Office Action states the claims are rejected under 35 U.S.C. 102(e) as being anticipated by Bellenger in view of Muller. However, based on the arguments of the rejections and the title of the rejections, Applicants believe that the 102(e) anticipation language is an error and instead, Applicants assume that the Office Action is asserting a §103(a) rejection.

To establish a *prima facie* case of obviousness, three basic criteria must be met. First, there must be some suggestion or motivation, either in the references themselves or in the knowledge generally available to one of ordinary skill in the art, to modify the reference or to combine reference teachings. Second, there must be a reasonable expectation of success. Finally, the prior art reference (or references when combined) must teach or suggest all the claim

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limitations. *MPEP §2143, p. 2100-124 (8th Ed., rev. 1, Feb. 2003)*. Applicants respectfully contend that there is no suggestion or motivation to combine their teachings, and thus no *prima facie* case of obviousness has been established.

Bellenger discloses an atomic network switch with integrated circuit switch nodes. The network switch receives and transmits standard LAN frames on physical interfaces (Bellenger, col. 6, lines 42-43). There are two internal modes for routing frames inside the switch. In the base mode, each node routes frames using a switch route header attached to the beginning of the regular LAN frame (Bellenger, col. 6, lines 54-57). In the look-up mode, the Ethernet addresses, or other fields of the control header of the frame are utilized to access a route table (Bellenger, col. 7, lines 1-3). A processor executes the node route logic for the node (Bellenger, col. 10, line 32). The process begins with the receipt of the frame on a particular port (Bellenger, col. 10, lines 35-36; Figure 4, step 300).

Muller discloses a shared memory management in a switched network element. The forwarding decision for a packet received on a given input port is complete before the next packet arrives at that input port (Muller, col. 6, lines 48-51). A buffer manager queue pointers to buffers that contain packet data rather than queuing the packet data itself (Muller, col. 9, lines 13-17). A pointer generator produces a next free buffer pointer at the start of the buffer allocation processing (Muller, col. 10, lines 50-51).

Neither Bellenger nor Muller discloses, suggests, or renders obvious: (1) receiving an indication denoting the start of frame transmission of a flow sensitive to out-of-order frame sequences. (2) dedicating a receive buffer from a plurality of receive buffers to receive all frames associated with the identified flow, and (3) assigning a pointer value to each frame for storage within a pointer buffer, each pointer value being based, at least in part, on a relative order in which the indications of start of frame transmissions associated with each frame are received, each pointer value associated with each respective frame being used to preserve a state of frame transmission order according to complete reception of the frame without modifying the respective frame.

The Office Action states that Bellenger discloses receiving up to a plurality of indications denoting the start of frame transmission on a corresponding plurality of communication links (Fig. 4, step 300; col. 10, lines 35-36). Applicants respectfully disagree. As discussed above, Bellenger merely discloses routing frames using a switch route header or a route table. Step 4 of

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Fig. 4 merely shows that the process begins with the receipt of the frame, not a plurality of indications denoting the start of the frame transmission as recited in claims 1, 21, 25, 32, and 38. The node in the switch routes a frame based on the contents of the header in the frame (Bellenger, col. 6, lines 50-53). Since the node examines the contents of the header in the received frame, it does not receive an indication denoting the start of frame transmission. An indication is not equivalent to contents of a header. It is a signal different from the receive data. (See, for example, specification page 12, lines 17-20; page 13, lines 8-19).

The Office Action further states that Bellenger discloses dedicating a receive buffer (element 207 in Fig. 3) to receive all frames associated with the identified flow and assigning a pointer value (identifying tag or hash values) to each frame for storage within a pointer buffer (element 221 in Fig. 3). Applicants respectfully disagree. First, the element 207 is a memory that contains a switch route table 220 and frame buffer 221. The switch route table 220 does not receive the frames. To say that the element 207 is a receive buffer implies that it contains the frame buffer 221 that receives the frames. Therefore, the same buffer 221 cannot be used to store a pointer buffer. Second, as discussed above, the buffer 221 does not store a pointer buffer. It stores the frames themselves (Bellenger, col. 10, lines 9-13). Third, and most importantly, a tag or hash value is not the same as a pointer value associated with a frame. The tag or the hash value is used to access the switch route table, not the frame (Bellenger, col. 7, lines 5-8; col. 9, lines 6-7).

The Office Action further states that Bellenger discloses each corresponding pointer value associated with each respective frame being used to preserve a state of frame transmission order (see col. 3, lines 7-61). Applicants respectfully disagree. Bellenger merely discloses the node route logic begins forwarding frames after it receives notification from the remote system that it is clear to forward frames (Bellenger, col. 3, lines 61-65). The order of transmission is preserved according to receiving a notification from a remote system, not by using the pointer value, and not according to complete reception of the frame.

Accordingly, Applicants respectfully request the rejections be withdrawn.

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Conclusion

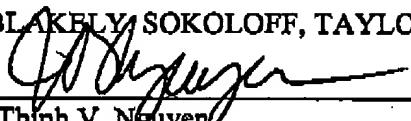
Applicant respectfully requests that a timely Notice of Allowance be issued in this case.

Respectfully submitted,

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Dated: August 27, 2004

By


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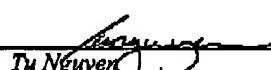
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